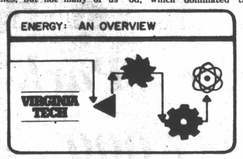
Energy Crises

The ancients fretted, too

Energy crises are not new. Humans have been using energy resources beyond their own muscles for thousands of years. Sometimes, reliance on them has led to human suffering when those resources were in short supply.

We all remember gas lines, but not many of us recall "Garfieldays," none of us were around during the wood crisis of Tudor England, and few of us are familiar with the deforestation of Italy during the time of the Roman Empire.



Our first source of energy was simply the food that fueled our bodies. At some point, our ancestors tamed fire, teaming it with wood to provide warmth, make their food/fuel more useful and help them fashion tools.

Several thousand years ago, humans domesticated animals and had that source of energy on hand to help them. Waterpower was harnessed with the waterwheel more than 2000 years ago, and windpower started making an important contribution with the Dutch design windmills of the 12th century.

By the 18th century, coal was taking over a large chunk of the energy market from wood, and in this century we've seen the rapid rise of petroleum products.

Transition from reliance on one fuel to reliance on another may occur because a new, better fuel is found, or because we run out of the old fuel and have to find a new one. Running out can be painful.

Italy was once covered with lush forests, but the Romans chopped or burned them down for fuel and other uses. Over the years, this contributed to erosion, decreased soil fertility, flooding, decreased crop yields and famines (shortages of food energy).

In England, as the forests in the east disappeared, the price of wood quadrupled between 1540 and 1580. Poor city dwellers stole anything made of wood; one community tried to freeze the price of wood; the national legislature eventually tried to force conservation of what trees were left.

Finally, coal filled in the demand/supply gap in England. However, by the time the production and transportation of coal was advanced enough to fill in the gap, many people, especially the poor, had suffered for years, and England had lost some energy-starved industries to other countries. Also, the need for energy obscured the hazards associated with coal, and London soon became enveloped in a dark, unhealthy cloud of smoke as a result of coal burning.

The U. S. accomplished its fuel transitions without such problems. Three cycles of energy use are apparent in this country's history. Wood, which dominated the market during the first cycle, peaked about 1870. The coal cycle followed, peaking about 1920. The third cycle featured oil and gas, and we are still in that cycle, with oil and gas supplying over 74 percent of our energy.

Although our transitions from one cycle to the next were smooth, the U. S. did see a coal shortage caused by World War I. The war effort consumed so much coal that a supply crunch ensued. Local governments had terrible problems trying to provide coal to the poor during the severe winer of 1918, people boarded coal.

The president was given the authority to fix coal prices because of price hikes caused by the heavy demand, Congress and the president bickered over the proper actions to take to alleviate the crisis. Harry A. Garfield, U. S. Fuel Administrator (the "Coal Czar"), was roundly denounced for ordering East-Coast businesses to close on certain days (Garfieldays) to save energy.

Americans incensed at the idea of sitting in a gas line for a couple of hours no doubt do not wish to experience an energy crisis of the magnitude some other peoples and times have seen. We would like to undergo a smooth transition to the next cycle of energy use.

Past transitions from one cycle to the next in this country were gradual and natural. A better fuel came on the scene and gradually took over the lion's share of the market. Today, as we stand on the threshold of a fourth cycle in energy use, we face a different type of trnasition.

We didn't switch from using coal to using oil and gas because we were running out of coal. We switched because oil and gas were more convenient to get and use, and because they were more versatile.

Now, we're talking about switching from oil and gas not because a new, better fuel is on the market, but because we're running out of oil and gas and are going to have to find a substitute, or substitutes, for them. We're being forced to create a new cycle of use.

A decade ago, uranium was seen as the new, better fuel that was going to take over from oil and gas and move us into the fourth cycle of energy use--the nuclear (fission) age. Today, controversy surrounds nuclear power.

Everyone has an opinion on energy and reams of conflicting information, often from equally qualified experts, bombard us. What the fourth cycle will/should be and when it will/should come are uncertain.

References: "Energy and the Environment," by John M. Fowler, in "Perspectives on Energy," edited by Lon C. Ruedisili and Morris W. Firebaugh; "Wood and Coal; a Change of Fuel," by A. D. Dyer, in History Today, September 1976; "Ecology in Ancient Civilizations," by J. Donald Hughes; "The fuel crisis, largely forgotten, of World War I," article by James P. Johnson.

This article is part of a course on energy offered by the Virginia Tech Mechanical Engineering Department and the Cooperative Extension Service. For more information, call your local extension office.

CLASSIFIED ADS GET RESULTS

The above coaches were honored at Friday night's football game for National Coaches Week. They are from left to right: Robert Hudson, Ray Archer, Charles Wilkerson, Howard Claybough, Stuart Justus, Francis Lewis, Lucy Harris, Louise Martin.

Falwell to speak at R-HHS

This Sunday afternoon, October 12 at 2:30 p.m., there will be a very special service at Randolph-Henry High School.

Charlotte Baptist Church, Charlotte Oourt House, Virginia, will be hosting the service with Dr. Jerry Falwell as guest speaker. Dr. Falwell is a nationally known evangelist and founder of the Old Time Gospel Hour television and radio network. Also accompanying Dr. Falwell will be Don Norman, who will be providing the special music.

It is a genuine pleasure for us to invite the public to attend this special service on October 12. There will be plenty of parking and seats available. Plans have also been made to provide a nursery. If you need additional information, please call Rev. Mike Gass at (804) 542-5392.

Raiderettes reschedule game

The Raiderette volleyball game scheduled for Oct. 14 against Buckingham has been canceled, according to coach Lucy Harris.

The Raiderettes have picked up a game to compensate, however. Harris notes that the local team will face off against Seven Hills in Lynchburg Oct. 13 at 5 p.m.

3 CARNATION
Budvase Special
$5.00
CASH & CARRY
HOURS:
MONDAY — SATURDAY:
8:30 A.M. — 6:00 P.M.
Superior Nursery & Greenhouse
&
SUPERIOR FLORIST
HIGHWAY 26 — APPOMATTOX, VA.
PHONE 352-7624

BEST OF BREED IN ROUND BALERS
Hesston 5500 Rounder
The proven performance leader.
$500 Cash Rebate Or
INTEREST FREE TO 6-1-81
Sure starts and easy operation make the popular 5500 the best value in round balers on the market today!
- Patented force-feed open-throat and exclusive vertical bale chamber deliver sure starts... bale after bale.
- Competitively priced with machines producing smaller bales that weigh less.
- Builds dense, good-looking bales that stand up longer.
- Bales measure 5' x 5' and weigh up to 1100 lbs.
SP-10 Feeder gives easy, one-man feeding of big bales weighing up to 3,000 lbs.
Rounder is a registered trademark of the Hesston Corporation.
Powell Ford Tractor
RT. 29 — WRIGHT SHOP RD.
Madison Heights, Va. (804) 845-4524
First with a better way.
HESSTON FARM EQUIPMENT

YOUR VOTE!
It Does Make A Difference

Times-Virginian NEWSPAPER
Serving Historic Appomattox Since 1892
PHONE 352-8215

J. E. Jamerson & Sons
BUILDING MATERIALS
Paints - Blocks - Woodwork
Cement, Etc.
DIAL 352-8227
APPOMATTOX, VIRGINIA

H. H. Moore, Jr. Trucking Co.
GENERAL HEAVY HAULING
Specializing in Lime
State Inspired
Hwy. 460 - Appomattox, Va.
Phone 352-7371

MAUDE'S RESTAURANT
A Famous Restaurant... In a Famous Town...
We will be happy to arrange for DINNER PARTIES- BANQUETS - AND SPECIAL OCCASIONS EVENTS - CALL 352-7211 FOR RESERVATIONS.
It's Better at Maude's

Oscar Jamerson & Sons
PULPWOOD DEALER
DIAL 352-5505
Appomattox, Virginia

LAWSON FORD, INC.
FORD SALES & SERVICE
Office & Sales 352-8221
Parts Dept. 352-8223
Service Dept. 352-8834
Appomattox, Virginia
Virginia Dealer License No. 2

STOP FOR A TREAT THAT CAN'T BE BEAT
TOP TREAT
HOME OF FINE FOODS!
PHONE 352-7539
Route 3
Appomattox, Va.

In Appomattox, It's
KING'S Super Market
WHERE IT COSTS LESS TO SHOP
Triangle Plaza
Appomattox, Va.

CENTRAL FIDELITY BANK
YOUR AREA FULL SERVICE BANK
APPOMATTOX, VIRGINIA

GAINES JEWELERS
MAIN STREET - APPOMATTOX, VA.
WATCH REPAIR
JEWELRY REPAIR
"Pleasing You, Pleases Us"

POE HDWE., CO., INC.
HARDWARE & ELECTRICAL SUPPLIES
DIAL 352-5575
Church Street Appomattox, Virginia

STUDENTS TAKE
The Times-Virginian To College!
Student Subscription
$6.00

•XEROX COPIES •OFFICE SUPPLIES
•ART SUPPLIES •RUBBER STAMPS
•MAGNETIC SIGNS
•OFFICE FURNITURE
•WEDDING INVITATIONS
Appomattox Office Supply
Lower Level—Times-Virginian Bldg.
507 COURT STREET — Appomattox
PHONE 352-7684

D.S. NASH CONSTRUCTION CO.
Grading and Paving
PHONE 352-8784
APPOMATTOX, VA.

John Mosby Inn Restaurant
Confederate Invs. - Appomattox, Va.
PHONE 352-5990
SUNDAY BUFFET
—Featuring—
Steamship Round
Baked Ham
Fried Chicken
$4.25
11:00 A.M. — 8:00 P.M.

WILBUN'S SUPER MARKET
YOUR HOMETOWN SUPERMARKET
Specializing in U.S. Choice Western Beef and Quality Groceries at Budget Prices.
APPOMATTOX, VIRGINIA

MOSES MOTOR CO., INC.
Chevrolet & Jeep
Sales And Service That Satisfies
Dial 352-5440
Appomattox, Virginia

Farmers National Bank
Member F.D.I.C.
MEMBER FEDERAL RESERVE
DIAL 352-7171
Appomattox, Virginia

Jamerson Bros. Trucking Co., Inc.
Phone 352-8211
•Local and Long Distance Hauling
Appomattox, Va.

APPOMATTOX HDWE. CO., INC.
A COMPLETE LINE OF HARDWARES APPLIANCES, PLUMBING, HOUSEWARE
Distributor of AMOCO PRODUCTS
FUEL OIL & GASOLINE

Central Virginia's Largest Selection of Baldwin
PIANOS..... ORGANS.....
Band Instruments, guitars, drums and AMPS.....
CLEARANCE SALE
Organs For Churches & Homes
OPEN: MONDAY — THURSDAY 9-9
Friday & Saturday 9-5
ROBERTS PIANO CO.
239-0369
8505 Timberlake Rd.
Lynchburg, Virginia

WHEN YOUR OPTOMETRIST PRESCRIBES GLASSES AND YOUR
REGISTERED OPTICIAN AT
EHRICH'S
Fills Your Prescription, You Also Get The Guidance Of a
FASHION EYEWEAR CONSULTANT
NO WONDER SO MANY HAVE SAID
See EHRICH'S
And See Better
See EHRICH'S
TO AVAIL YOURSELF OF OUR
COMPLETE SERVICE
EHRICH'S
1107 Main Street
Lynchburg, Va. 24504

WILBUN'S
SUPER MARKET • RT. 460 • APPOMATTOX, VA.

FRESH GROUND BEEF
$1.19 Lb.
BONELESS SIRLOIN Tip STEAK $2.49 Lb.
BONELESS CHUCK ROAST
USDA CHOICE
$1.79 Lb.
FRESH BAKING HENS 5 to 7 Lb. Avg. 69¢ Lb.
(Fat Back) SALT PORK 49¢ Lb.
Country Style SPARE RIBS
$1.29 Lb.
ARMOUR STAR BACON $1.29 12 Oz. Pkg.
ARMOUR MEAT HOT DOGS $1.19 12 Oz. Pkg.
ARMOUR STAR BOLOGNA $1.29 12 Oz. Pkg.
LUCK'S 29 Oz. Can Pinto Beans 69¢
Specials Good Through Sat., Oct. 11
We reserve the right to limit quantity

BEST • FRESH PRODUCE
U.S. No. 1 POTATOES 10 Lb. BAG $1.49
Murray's Apple Cider $2.39 Gallon
Jonathan APPLES 79¢ 3 Lb. Bag
No. 1 Sweet Potatoes 4 Lbs. $1.00
1 Lb. Bag CARROTS 4 FOR $1.00
CELERY Large Stalk 39¢
Local Grown Smooth Kale 39¢ Lb.
Fresh Coconut Each 59¢
Red, White or Blue GRAPES 79¢ Lb.
Cauliflower Large Head 99¢

Come In And See Our Large Display Of HALLOWEEN CANDY!

Green Giant Sale
Whole Kernal 17 Oz. Can Golden Corn 2 FOR 79¢
Cream Style 17 Oz. Can Golden Corn
French Sliced 16 Oz. Can Green Beans
Cut 16 Oz. Can Green Beans
Sweet Peas 17 Oz. Can
Whole Kernal 12 Oz. Can Niblets Corn
2 FOR 88¢
Sliced Mushrooms 4½ Oz. Jar
Whole Mushrooms 4½ Oz. Jar
99¢

NEW! Duncan Hines Cookie mix
Chocolate Chip 18 Oz.
Oatmeal Raisin 17.5 Oz.
Double Chocolate 17 Oz.
Golden Sugar 15 Oz.
Peanut Butter 16.5 Oz.
$1.19 99¢

Dr. Pepper / Sunkist & Sugar Free Dr. Pepper
8 — 16 Oz. Bottles $1.39 Plus Deposit
Scotties Jumbo Pack 300's 99¢
RED BAG Coffee & Chicory $1.99 1 Lb. Bag
Blue Ribbon Bathroom Tissue 4 Roll 79¢

GLOVE KID Peanut Butter 2½ Lb. Jar $1.99
Hot Dog & Hamburger BUNS 2 FOR 99¢
TONY PIZZAS
Sausage - 21¾ Oz.
Pepperoni - 20 Oz.
Sausage & Pepperoni - 21¾ Oz.
SUPREME PIZZA FREE SAMPLES Friday & Saturday $2.89
9-LIVES CAT FOOD 4 LB. BAG $1.99
30¢ OFF

QUALITY BRAND NAME Frozen Foods AND DAIRY PRODUCTS
Boston Bonnie Donuts Doz. 79¢
Banquet Fried Chicken 2 Lb. Box $2.39
BANQUET Cook-N-Bags All Varities 39¢
Pillsbury Buttermilk Or Sweet Milk BISCUITS Pack Of 4 89¢
RICHFOOD GRADE A EGGS Doz. 69¢
TROPICANA Orange Drink 64 Oz. 89¢
RICHFOOD PURE Orange Juice $1.19 64 Oz.
Sealtest Sherbet All Flavors Quart 99¢